

HMI EXT BILLING USER MANUAL

May 15, 2008

Doc #E134724 V.1.02



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"The Leader in Web Accessed Power Monitoring and Control"

HMI EXT Billing User Manual
Version 1.02

Published by:
Electro Industries/GaugeTech
1800 Shames Drive
Westbury, NY 11590

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About Electro Industries/GaugeTech

Founded in 1973 by engineer and inventor Dr. Samuel Kagan, Electro Industries/GaugeTech changed the face of power monitoring forever with its first breakthrough innovation: an affordable, easy-to-use AC power meter.

Thirty years later, Electro Industries/GaugeTech, the leader in Web-Accessed Power Monitoring, continues to revolutionize the industry with the highest quality, cutting edge power monitoring and control technology on the market today. An ISO 9001:2000 certified company, EIG sets the industry standard for web-accessed power monitoring, advanced power quality, revenue metering, artificial intelligence reporting, industrial sub-metering and substation data acquisition and control. EIG's products can be found on site at virtually all of today's leading manufacturers, industrial giants and utilities.

In fact, EIG products are used globally and EIG is accepted as the world leader in power monitoring and metering technology. With direct offices in the United States, Turkey, Brazil, Mexico, Guatemala, Croatia and the Philippines, EIG support is available in most regions around the world. Our worldwide support, advanced technology and quality manufacturing standards make EIG the superior choice when dependable, reliable service is paramount.

Document Revision History:

| | | |
|------------------------------------|-----------|---------------|
| HMI EXT Billing User Manual V.1.01 | 3/14/2007 | First version |
|------------------------------------|-----------|---------------|

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Chapter 1

Getting Started with HMI EXT Billing

1.1: Overview

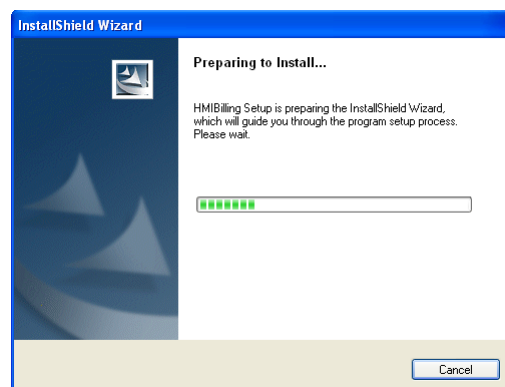
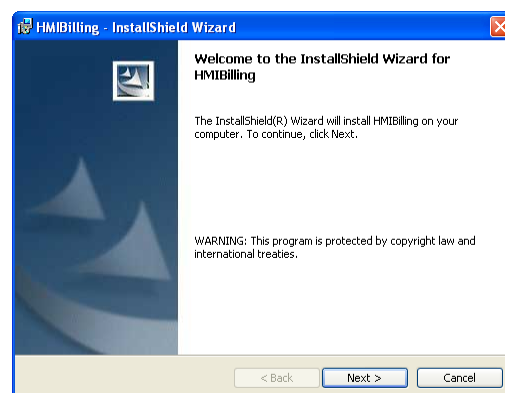
HMI EXT Billing allows you to print **Billing Reports** for **multiple meters**, using Billing data from the **HMI EXT** application. You can also print **Data Reports** for the meters, using the meter's **log files**, generated by the **Communicator EXT** application. See the *HMI EXT User Manual* and the *Communicator EXT 3.0 User's Manual* for additional information on those applications.

The **HMI EXT Billing** application allows you to:

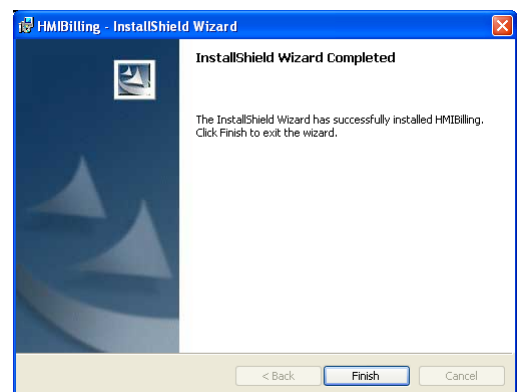
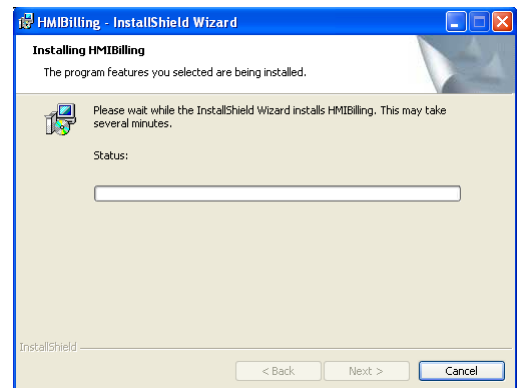
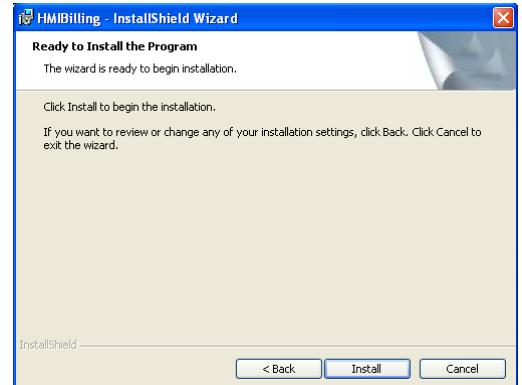
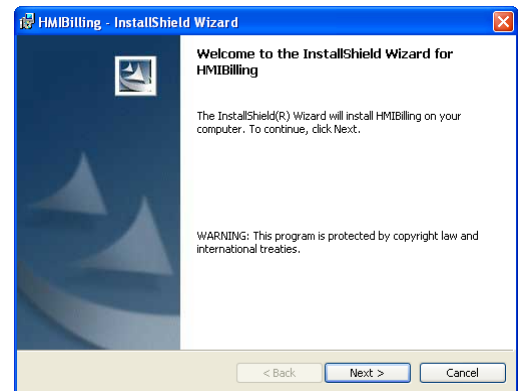
- Set up **user access** to the application
- Set up your **Company data**, to be printed on the Billing reports
- Set up **Client data**, including **locations** and **meters**
- Set up **Billing Rate structures**
- Set up **Time of Use** data
- Print **Billing Reports**
- Print **Data Reports**.

1.2: Installing HMI EXT Billing Software

1. Insert the **HMI EXT Billing** CD into your PC's **CD drive**.
2. Open the software **Setup** file by double-clicking on **hmiextbilling.exe**. You will see the first screen on the right.
3. Click the **Next** button to use the InstallShield Wizard to install **HMI EXT Billing**. (Click **Cancel** to exit without installing the software.)
4. You will see the second screen on the right. This is a message screen: you do not need to do anything to continue with the software installation. (Click **Cancel** to exit without installing the software.)



5. You will see the first screen on the right. Click **Next** to continue with the installation. (Click **Cancel** to exit without installing the software.)
6. You will see the second screen on the right. Click **Install**. (Click **Cancel** to exit without installing the software.)
7. You will see the third screen on the right. This is a message screen: you do not need to do anything to continue with the software installation. (Click **Cancel** to exit without installing the software.)
8. When the installation is complete, you will see the fourth screen on the right. Click **Finish** to close the InstallShield Wizard.



1.3: Running HMI EXT Billing

To **run** the HMI Billing EXT application, either:

- Access **HMI EXT Billing** from a **HMI EXT Project** screen.
- Use the Start menu to open the application:
Click **Start>Programs>Electro Industries>HMI EXT>Billing**.

You will see the **Logon** screen shown in Section 2.1 of Chapter 2.

1.4: Exiting HMI EXT Billing

To **exit** the HMI Billing EXT application, click **File>Exit** from the **Title Bar** of the application.

1.5: Setting Up User Accounts

HMI EXT Billing allows you to control **user access** through the setting up of **two** types of **User Accounts**:

- **Regular user**: able to generate reports and view data.
- **Administrative user**: able to perform all tasks, including configuration.

1. Either:

- Click the **Users** icon in the **Tool Bar**.
- Click **Maintain>Users** from the **Title Bar**.

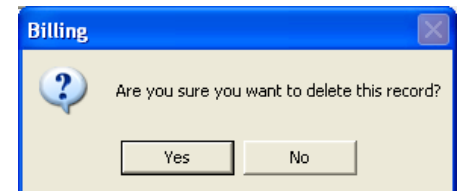
You will see the screen shown on the right. The **top** of the screen is used for basic **information** for the **User Account**; the bottom of the screen has two tabs for data entry: **General Information** and **Contact Details**.

2. You can **add**, **edit**, or **delete** User Accounts:

- To **add** a new User Account:
 - a. Click the **Add** button.
 - b. Enter:
 - **User Type**: select **Administrator** or **User** from the pull-down menu.
 - **Username**: this name will be used in the logon procedure. See Section 2.1 of Chapter 2.
 - **Password**: this password will be used in the logon procedure. See Section 2.1 of Chapter 2.
 - c. Click the **General Information** tab and enter the following (the only required field is **Civil Status**):
 - **Title**
 - **First Name**
 - **Middle Name**
 - **Last Name**
 - **Gender**: select one of the radio buttons.

- **Birth Date**
 - **Civil Status:** select from pull-down menu.
 - **Nationality**
- d. Click the **Contact Details** tab. You will see the screen shown on the right.
 - e. Enter the following (none of these fields are required):
 - **Address**
 - **Tel(ephone) No.**
 - **Mobile (Cell Phone) No.**
 - **Email (Address)**
 - **Website (Address)**
 - f. Click the **Save** button.

- To **edit** an existing User Account:
 - a. Click the **Find** button. A small window opens, listing the User Accounts.
 - b. Double-click on the User Account you want to change.
 - c. The data for the User Account now fills the entry fields on the screen. Click the **Edit** button.
 - d. Change whatever information you want.
 - e. Click the **Save** button to save your changes.
- To **delete** an existing User Account:
 - a. Click the **Find** button to display a list of User Accounts.
 - b. Double-click on the User Account you want to delete.
 - c. The data for the User Account now fills the entry fields on the screen. Click the **Delete** button.
 - d. You will see a Confirmation window. Click **Yes** to delete the User Account; click **No** to close the Confirmation window without deleting the User Account.



3. When you have finished setting up User Accounts, click the **Exit** button to close the screen.

1.6: Understanding Data Files

The **HMI EXT Billing** application is capable of accessing different data sources and using them to generate reports. The two types of **data sources** used by **HMI EXT Billing** are:

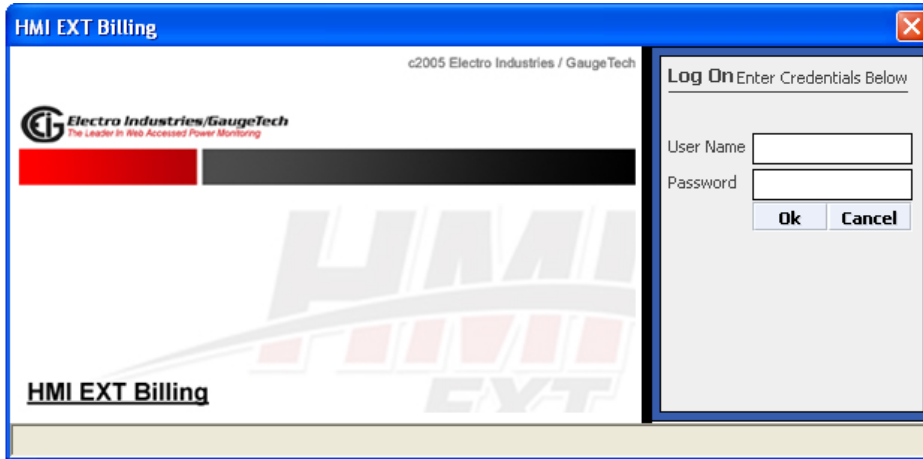
- **EIG Trend Data:** derived from the **Trend** files generated by **HMI EXT**.
- **EIG Data File:** derived from the **Log** files generated by **Communicator EXT**.

HMI EXT Billing is able to print **Billing/Data reports** for a meter as long as the meter supports the data sources listed above.

Chapter 2

Performing HMI EXT Billing Tasks

2.1: Logging on to HMI EXT Billing



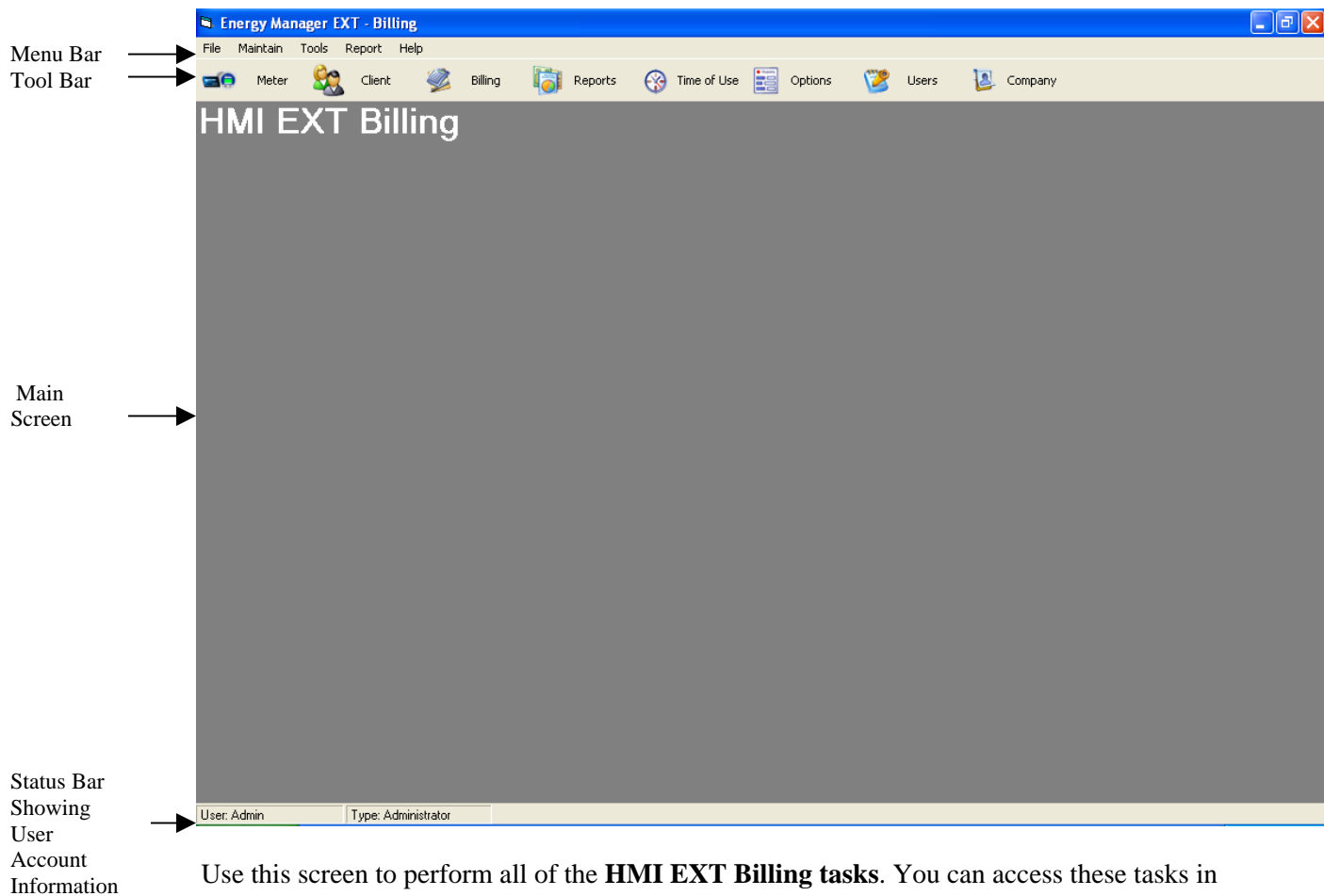
This screen allows you to **logon** to **HMI EXT Billing**. The **default Logon** is:

- **User: Admin**
- **Password: adm**

1. If this is the **first time** you are logging on to **HMI EXT Billing**, or if you have not changed the default User and Password, use this logon information. Otherwise, enter the **current User ID** and **Password**.
2. Click **OK** to **log on**. (Click **Cancel** to exit the **Logon** screen without opening HMI EXT Billing.)
3. You will see the screen shown on the next page.

2.2: Using the HMI EXT Billing Main Screen

The **HMI EXT Billing** main screen opens once you log on to the application.



Use this screen to perform all of the **HMI EXT Billing tasks**. You can access these tasks in two ways:

- **Menu Bar:** click an item in the **Menu Bar - File, Maintain, and Tools**, to open menus containing the **HMI Billing tasks** and related **features**.
- **Tool Bar:** click an icon in the **Tool Bar - Meter, Client, Billing, Reports, Time of Use, Options, Users, and Company**, to access the **HMI Billing tasks**.

See the following sections for instructions on performing **HMI EXT Billing tasks**. For instructions on setting up **user accounts**, see Chapter 1; for instructions on printing the **HMI EXT Billing Reports**, see Chapter 3.

2.3: Setting Up Company Information

1. Either:

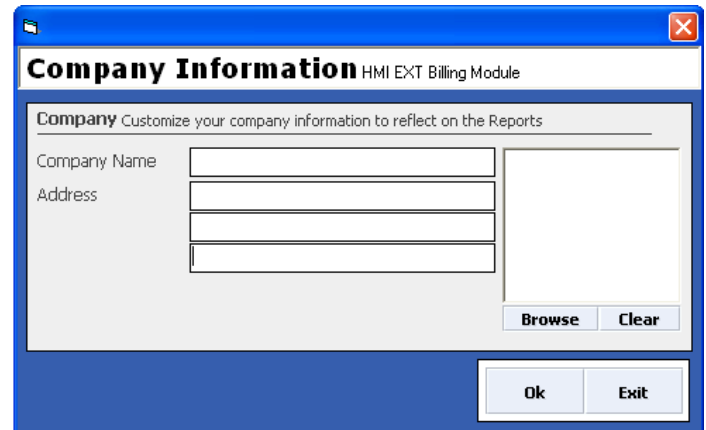
- Click the **Company** icon in the **Tool Bar**.
- Click **Maintain>Company** in the **Title Bar**.

You will see the screen shown on the right.
It allows you to set up **information** for your **Company**. This information will **print** on the HMI EXT Billing **Reports**.

2. Enter the following:

- **Company Name**
- **Company Address**

3. Click the **Browse** button to locate a **logo** or **image** that you want printed on the Billing **reports**. Once you select the image, it will be displayed in the box on the right side of the screen.



NOTES:

- The recommended image size is 105 x 94 pixels.
- To **clear** an image from the box, click **Clear**.

4. Click **OK** to **save** the information you entered. (Click **Exit** to close the window without saving any changes.)

You will see a **Message window** stating that the company information was successfully updated. Click **OK**. The **Message window** and the **Company Information** screen both close.

2.4: Setting up Meter Information

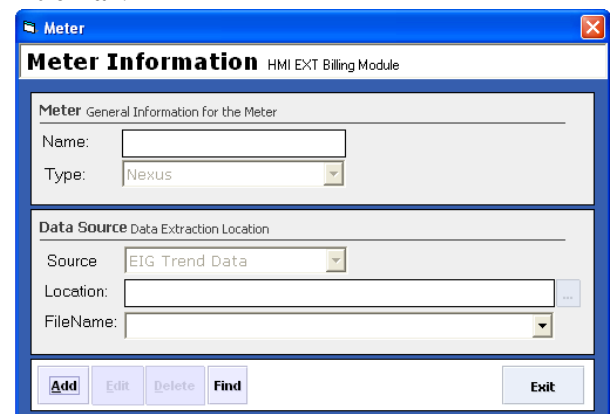
1. Either

- Click the **Meter** icon in the **Tool Bar**.
- Click **Maintain>Meter Information** in the **Title Bar**.

You will see the screen shown on the right.
It allows you to set up your **meters**.

2. You can add, edit, or delete meters:

- To **add** a new meter:
 - a. Click the **Add** button.
 - b. Enter:
 - **(Meter) Name**
 - **(Meter) Type**: select from pull-down

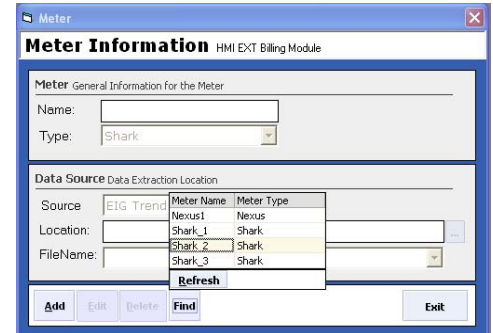


menu. Either **Nexus** or **Shark**.

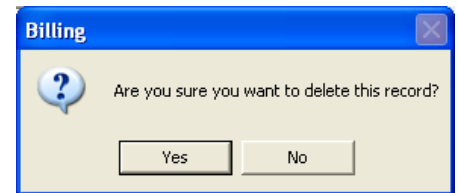
- **(Data) Source:** select from pull-down menu. Either **EIG Trend Data** or **EIG Data File**.
- **(Data) Location:** click “...” to Browse for the file’s location. For the EIG Trend Data, the Location entry should point to the folder with the HST files. For the EIG Data File, the Location entry should point to the folder with the DB file.
- **FileName:** click the pull-down menu to select the file name. This field is used with EIG Trend Data, only. The pull-down menu will list all of the HST files in the folder.

c. Click the **Save** button.

- To **edit** an existing meter’s information:
 - a. Click the **Find** button. A small window opens, listing the meters.
 - b. Double-click on the meter you want to edit.
 - c. The meter’s data now fills the entry fields on the screen. Click the **Edit** button.
 - d. Change whatever information you want.
 - e. Click the **Save** button to save your changes.



- To **delete** an existing meter:
 - a. Click the **Find** button to display a list of meters.
 - b. Double-click on the meter you want to delete.
 - c. The meter’s data now fills the entry fields on the screen. Click the **Delete** button.
 - d. You will see a Confirmation window. Click **Yes** to delete the meter; click **No** to close the Confirmation window without deleting the meter.



2.5: Setting Up Client Information

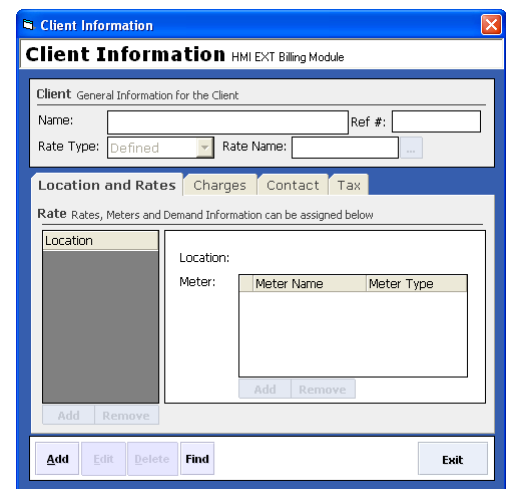
1. Either

- Click the **Client** icon in the **Tool Bar**.
- Click **Maintain>Client** in the **Title Bar**.

You will see the screen shown on the right. It allows you to set up **clients**, assign **Locations** to **meters**, and assign **Rate Charges** and **other charges** for the client..

2. You can perform the following tasks:

- To **add** a new client:
 - a. Click the **Add** button.
 - b. Enter:
 - **(Client) Name**
 - **(Client) Ref #:** a reference number for this client, optional.
 - **Rate Type:** select from pull-down menu. Either:



- i. **Defined and Rate Name:** click the “...” button to display a list of Rate Names. Select the one you want to use.
- ii. **Range:** The **Rate Name** field will be replaced with a **View Ranges** button. Click this button to display a list of the **Rate Ranges**. See Section 2.6, steps 6-7, for instructions on **setting the Rate Range**.

- **Location:** use this field to add locations for the client. Each location can have one or more meters assigned to it. To **add a location**:

- i. Click the **Add** button.
- ii. Click in the **entry** field and enter a **name** for the location.
- iii. A **Confirmation** window opens. Click **Yes** to save the location you entered.

To **remove a location**:

- i. Click on the location.
- ii. Click the **Remove** button.
- iii. A **Confirmation** window opens. Click **Yes** to remove the location you selected.

Enter Location Here

- **Meter:** use this field to enter meters for locations. To **add meters**:
 - i. Click on the **Location** in the Location list. The Location is displayed in the **Meter** box.
 - ii. Click the **Add** button in the Meter Box.
 - iii. Select the meter from the pull-down menu, by double-clicking it.
 - iv. Click the **Save** button. The meter you selected is added to the Meter's list.

Highlight Location

Click to Select Meter

To **remove a meter**:

- i. Click on the meter.
- ii. Click the **Remove** button.
- iii. A **Confirmation** window opens. Click **Yes** to remove the meter you selected.

- **Charges:** use this feature to add charges other than normal rate charges for a client.
 - i. Click on the **Charges** tab. The **Charges** box opens in the middle of the screen.
 - ii. Click the **Add** button. You are now able to enter:
 - **(Charge) Description:** this will appear on the Client's report.
 - **Apply To:** Click in this field and select from the pull-down menu. You can select **Period** (the charge will be applied once to a pay period, for example, a one-month range); or **Day** (the charge will be applied once a day during the pay period, that is, Charge times number of days in pay period).
NOTE: See Section 2.6, steps 10-11 for instructions on setting the Billing Period.
 - **Amount:** the amount of the charge.
 - **Qty:** the number of client meters, if the charge is assessed per meter.
 - **Total:** this field displays the client's total charges per billing period.
 - iii. A **Confirmation** window opens. Click **Yes** to save the charges entries.
- **Contact:** allows you to enter **contact information** for the **Client**.
 - i. Click the **Contact** tab.
 - ii. Enter **Contact Person, Telephone #, and Fax #.**
- **Tax:** allows you to specify a **Tax Status** for the **Client**.
 - i. Click the **Tax** tab.
 - ii. Select either **Tax** and enter the **Tax Code**; or **Tax Exempt** and enter the **Tax Exempt Code**.

c. Click the **Save** button.

■ To **edit** an existing client's information:

- a. Click the **Find** button to open a list of Clients.
- b. **Double-click** a **Client's name** in the list to select the Client.
- c. Change any information you want.
- d. Click the **Save** button.

■ To **delete** an existing client:

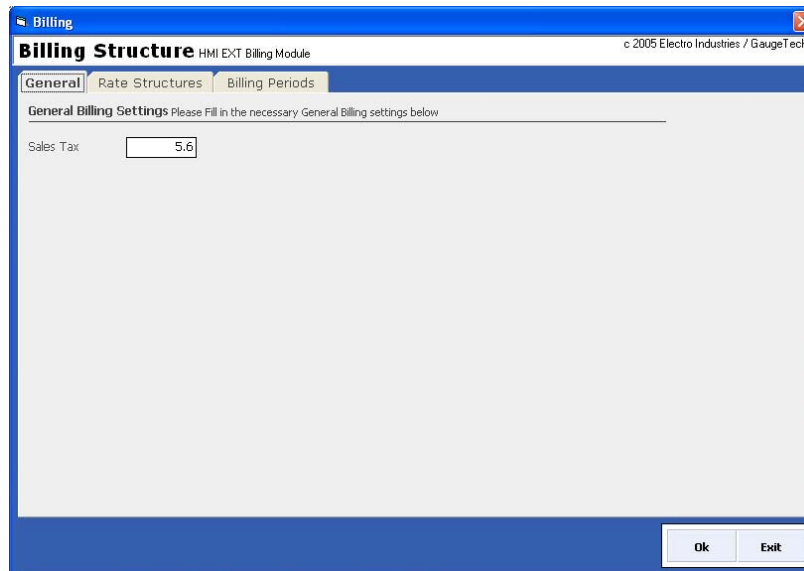
- a. Click the **Find** button to open a list of Clients.
- b. **Double-click** a **Client's name** in the list to select the Client.
- c. Click the **Delete** button.
- d. A **Confirmation** window opens. Click **Yes** to delete the Client.

3. Click the **Exit** button to close the **Client Information** screen.

2.6: Setting Up the Billing Structure

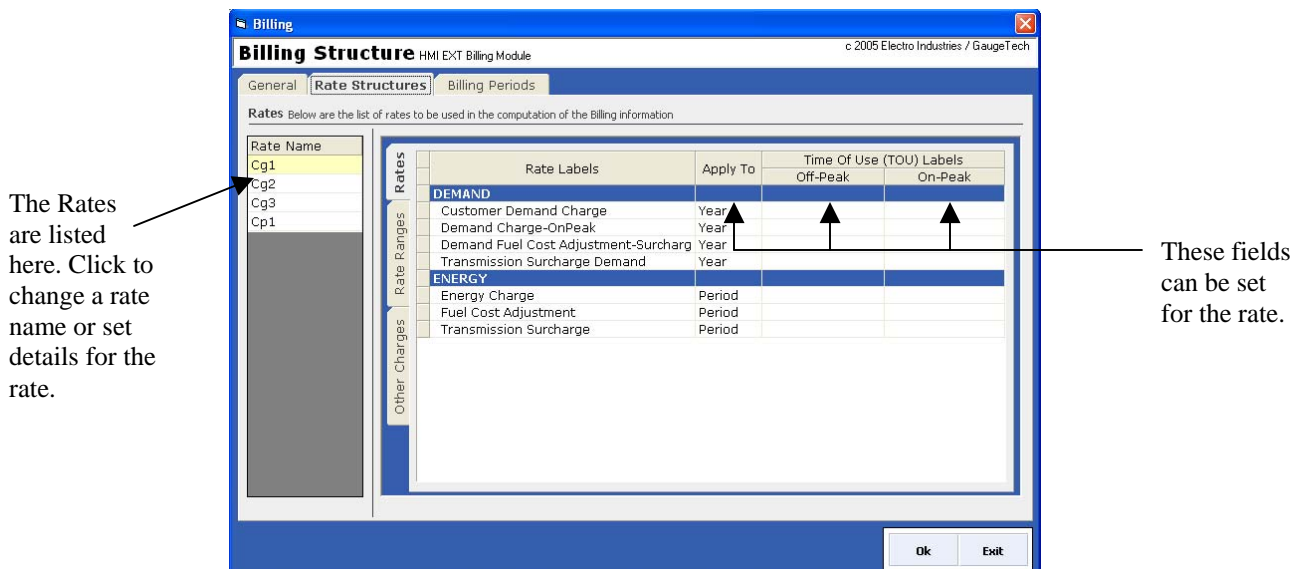
HMI EXT Billing can accommodate **multiple rate structures**. Use this task to set up the rate structures you will use in generating your **Billing Reports**.

1. Either:
 - Click the **Billing** icon in the **Tools Bar**.
 - Click **Maintain>Billing Structure>Rate Structure** in the **Title Bar**.
2. You will see the screen shown below. Note the tabs at the top of the screen: **General**, **Rate Structure**, and **Billing Periods**. Use these screens to **configure** the **rates** used by **HMI EXT Billing**.



The screenshot shows the 'Billing Structure' window with the 'General' tab selected. The title bar reads 'Billing' and the window title is 'Billing Structure HMI EXT Billing Module'. The status bar at the bottom right says 'c 2005 Electro Industries / GaugeTech'. The main area is titled 'General Billing Settings Please Fill in the necessary General Billing settings below'. There is a 'Sales Tax' field with the value '5.6'. At the bottom right are 'Ok' and 'Exit' buttons.

3. The **General** tab allows you to **enter** the **Sales Tax** rate that will be used when Billing information is computed by the software.
4. Click the **Rate Structures** tab. You will see the screen shown below. It allows you to configure the **Billing Rates**. There are three tabs for this screen: **Rates**, **Rate Ranges**, and **Other Charges**.



The screenshot shows the 'Billing Structure' window with the 'Rate Structures' tab selected. The title bar and window title are the same as the previous screenshot. The status bar says 'c 2005 Electro Industries / GaugeTech'. The main area is titled 'Rates Below are the list of rates to be used in the computation of the Billing information'. On the left is a list of 'Rate Name' with 'Cg1' selected. The main table has columns: 'Rate Labels', 'Apply To', and 'Time Of Use (TOU) Labels' (with sub-columns 'Off-Peak' and 'On-Peak'). The table is divided into 'DEMAND' and 'ENERGY' sections. Arrows point from text annotations to the 'Rate Name' list and the 'Off-Peak'/'On-Peak' columns.

The Rates are listed here. Click to change a rate name or set details for the rate.

These fields can be set for the rate.

| Rate Labels | Apply To | Time Of Use (TOU) Labels | |
|--------------------------------------|----------|--------------------------|---------|
| | | Off-Peak | On-Peak |
| DEMAND | | | |
| Customer Demand Charge | Year | | |
| Demand Charge-OnPeak | Year | | |
| Demand Fuel Cost Adjustment-Surcharg | Year | | |
| Transmission Surcharge Demand | Year | | |
| ENERGY | | | |
| Energy Charge | Period | | |
| Fuel Cost Adjustment | Period | | |
| Transmission Surcharge | Period | | |

The **Rate Names** are listed in the box on the left side. You can **change** a name by clicking on it.

5. With the **Rates** tab selected, click on a **Rate Name** to display the settings for that rate in the **Rate Labels** fields. You can change the following fields:
 - **Apply To:** from the pull-down menu, select either **Year** or **Period** to apply this rate to the year or to a period.
 - **Time of Use Labels: Off-Peak/On-Peak:** enter the amount you want to apply to off-peak/on-peak. Leave this field blank if there is no charge.

6. Click the **Rate Ranges** tab to enter a **range** for a rate. You will see the screen shown below. It allows you to configure a consumption range in kWh that can then be applied to a billing period that falls within that range.

NOTE: You must set the **Client's Rate Type** to **Range** for this feature to take effect. See Section 2.5 for instructions on selecting the Client's Rate Type.

| Range (kwh/period) | |
|--------------------|-----------|
| From | 1.00 |
| To | 10,000.00 |

7. In the **Rate Name** box, click the rate you want to configure. Enter:
 - **From:** beginning kWh value.
 - **To:** ending kWh value.

8. Click the **Other Charges** tab to enter **miscellaneous charges** for a rate. You will see the screen shown below.

The screenshot shows a software window titled "Billing" with a subtitle "Billing Structure HMI EXT Billing Module". It has three tabs: "General", "Rate Structures", and "Billing Periods". The "Rate Structures" tab is active. Below the tabs, there is a section titled "Rates" with the text "Below are the list of rates to be used in the computation of the Billing information". On the left, there is a list of "Rate Name" with entries: Cg1, Cg2, Cg3, and Cp1. On the right, there is a table with columns: "Description", "Apply To", and "Amount". The table is currently empty. Below the table are "Add" and "Remove" buttons. At the bottom right of the window are "Ok" and "Exit" buttons.

9. In the **Rate Name** box, click the rate you want to configure. Enter:
- **(Charge) Description**
 - **Apply To:** Click in this field and select from the pull-down menu. You can select **Period** (the charge will be applied once to a pay period, for example, a one-month range); or **Day** (the charge will be applied once a day during the pay period, that is, Charge times number of days in pay period).
NOTE: See steps 10-11 for instructions on setting the Billing Period.
 - **(Charge) Amount**

10. To set up the **Billing Periods**, click the **Billing Periods** tab at the top of the screen. You will see the screen shown below. It shows the **Billing Periods**, with their date and time range.

Billing Structure HMI EXT Billing Module c 2005 Electro Industries / GaugeTech

General Rate Structures **Billing Periods**

Billing Period These are user defined periods specified and can be used in generating billing reports

| Number | Label | From | | To | |
|--------|-----------|-------|-------|-------|-------|
| | | Date | Time | Date | Time |
| 1 | JANUARY | 12/16 | 00:00 | 01/16 | 00:00 |
| 2 | FEBRUARY | 01/16 | 00:00 | 02/15 | 23:59 |
| 3 | MARCH | 02/16 | 00:00 | 03/15 | 23:59 |
| 4 | APRIL | 03/16 | 00:00 | 04/15 | 23:59 |
| 5 | MAY | 04/16 | 00:00 | 05/15 | 23:59 |
| 6 | JUNE | 05/16 | 00:00 | 06/15 | 23:59 |
| 7 | July | 06/16 | 00:00 | 07/15 | 23:59 |
| 8 | AUGUST | 07/16 | 00:00 | 08/15 | 23:59 |
| 9 | SEPTEMBER | 08/16 | 00:00 | 09/15 | 23:59 |
| 10 | OCTOBER | 09/16 | 00:00 | 10/15 | 23:59 |
| 11 | NOVEMBER | 10/16 | 00:00 | 11/15 | 23:59 |
| 12 | DECEMBER | 11/16 | 00:00 | 12/15 | 23:59 |

Please NOTE that the Period Ranges required to cover all data should be end to end (e.g., Period 1 = 01/15 00:00 to 02/16 00:00; Period 2 = 02/16 00:00 to 03/16 00:00)

Ok Exit

11. Click in one of the following fields to change it:

- **(Billing Period) Label**
- **From Date/Time:** enter the beginning date and time for the Billing Period.
- **From Date/Time:** enter the ending date and time for the Billing Period.

12. When you have finished your configurations, click **OK** to save your changes and close the **Billing Structure** screen.

CAUTION! Clicking Exit will close the screen without saving any changes you have made.

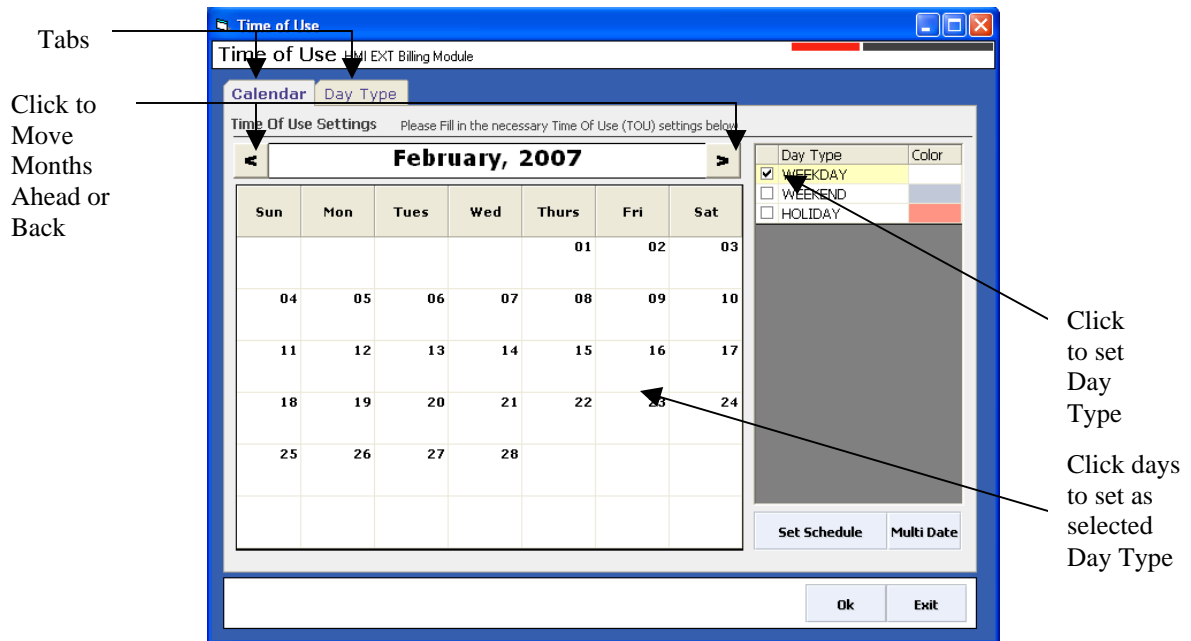
2.7: Setting Up Time of Use

The **Time of Use** feature allows you to configure the **Holidays**, **Weekdays**, and **Weekend** information for the **Off Peak** and **On Peak** schedules of **HMI EXT Billing**.

1. Either:

- Click the **Time of Use** icon in the **Tool Bar**.
- Click **Maintain>Time of Use** from the **Title Bar**.

You will see the screen shown below. The **Time of Use** screen has two tabs: **Calendar** and **Day Type**. The **Calendar** screen is displayed when you select the **Time of Use** function.



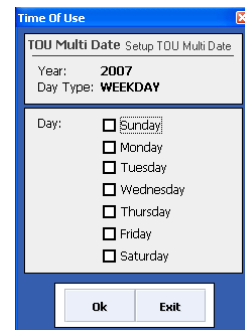
The **Calendar** tab displays the screen shown above.

2. Click the checkbox next to the **Day Type** you want to set: **Weekday**, **Weekend**, or **Holiday**. The **Day Types** are color-coded, as shown in the **Color** field.

3. Either:

- Click a day of the calendar and the **Set Schedule** button to mark the day as the selected **Day Type**.
- Click the **Multi Date** button to set more than one day as the selected **Day Type**.
 - a. A small window opens, allowing you to select the day(s). See the screen on the right.
 - b. Click the checkbox next to the day(s) you want to set as the **Day Type** you selected. The **year** and **Day Type** are displayed at the top of the window.
 - c. Click the **OK** button.

For example, to mark all of the weekends on the calendar at one time, select Saturday and Sunday and click **OK**. The calendar will then be shown with all of the weekends marked.



- Click the **Day Type** tab to configure On-Peak and Off-Peak for the **Day Type(s)**. You will see the screen shown below.

Time of Use HMI EXT Billing Module

Calendar **Day Type**

Time Of Use Settings Please Fill in the necessary Time Of Use (TOU) settings below

| Day Type | Interval | Time Of Use (TOU) Labels | |
|----------|---------------------|-------------------------------------|--------------------------|
| | | Off-Peak | On-Peak |
| WEEKDAY | 00:00:00 - 00:14:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| WEEKEND | 00:15:00 - 00:29:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| HOLIDAY | 00:30:00 - 00:44:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 00:45:00 - 00:59:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 01:00:00 - 01:14:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 01:15:00 - 01:29:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 01:30:00 - 01:44:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 01:45:00 - 01:59:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 02:00:00 - 02:14:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 02:15:00 - 02:29:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 02:30:00 - 02:44:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 02:45:00 - 02:59:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 03:00:00 - 03:14:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 03:15:00 - 03:29:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 03:30:00 - 03:44:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | 03:45:00 - 03:59:59 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Ok Exit

- Click the **Day Type** you want to configure: **Weekday**, **Weekend**, or **Holiday**.
- Mark each hour of the day as either **Off-Peak** or **On-Peak** by clicking on the checkbox next to the option. (Use the **scroll bar** to see hours not fitting on the screen.)
- When you have finished your configurations, click **OK** to save your entries and close the **Time of Use** screen.

CAUTION! Clicking Exit will close the screen without saving any changes you have made.

Chapter 3

Printing HMI EXT Billing Reports

3.1: Overview

HMI EXT Billing allows you to print **Billing** and from the **HMI EXT** application's **Billing database**. Follow the procedures in this chapter to print **Billing Reports** using the **HMI EXT Billing** software.

3.2: Using the Options Screen

The **Options** screen allows you to set up information for your **Billing Reports**.

1. Either:

- Click the **Options** icon from the **Tool Bar**.
- Click **Tools>Options** from the **Title Bar**.

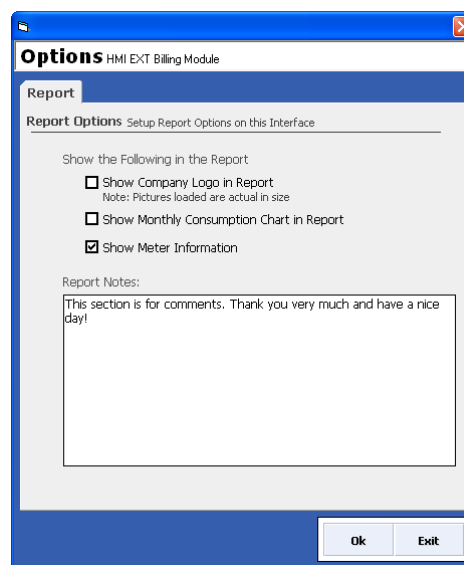
You will see the screen shown on the right.

2. You can do the following:

- Show **Company Logo** (set up in the **Company Information** screen), **Monthly Consumption Chart** (12 months of consumption presented in a bar graph), and/or **Meter Information** (previous reading, present reading, and total kWh consumption per meter) in the **Billing Reports**: click the **checkbox** next to each option you want.
- Enter **notes** to be printed on the **Billing Reports** in the **Report Notes** entry box.

3. Click the **OK** button to save your changes and close the **Options** screen.

CAUTION! Clicking **Exit** will close the screen without saving any changes you have made.

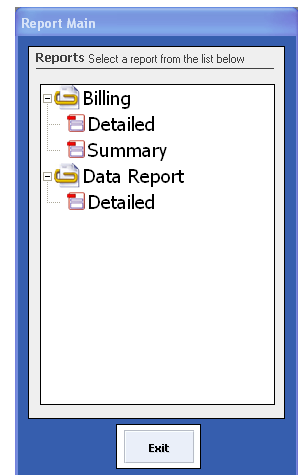


3.3: Printing the Billing Reports

1. Click the **Reports** icon in the **Tool Bar**. You will see the screen shown on the right. From this screen you can select:
 - **Detailed Billing Report**
 - **Summary Billing Report**
 - **Detailed Data Report**

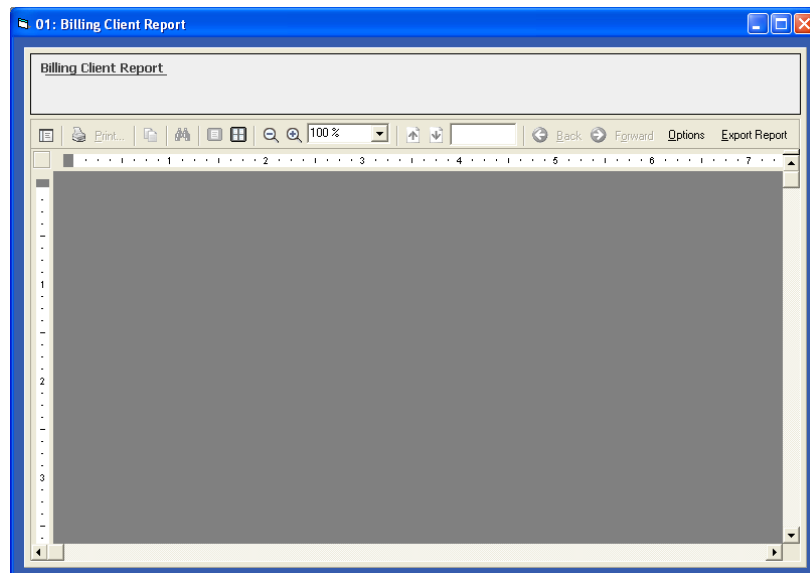
See the following sections for instructions on printing these reports.

2. Click the **Exit** button to close this screen.

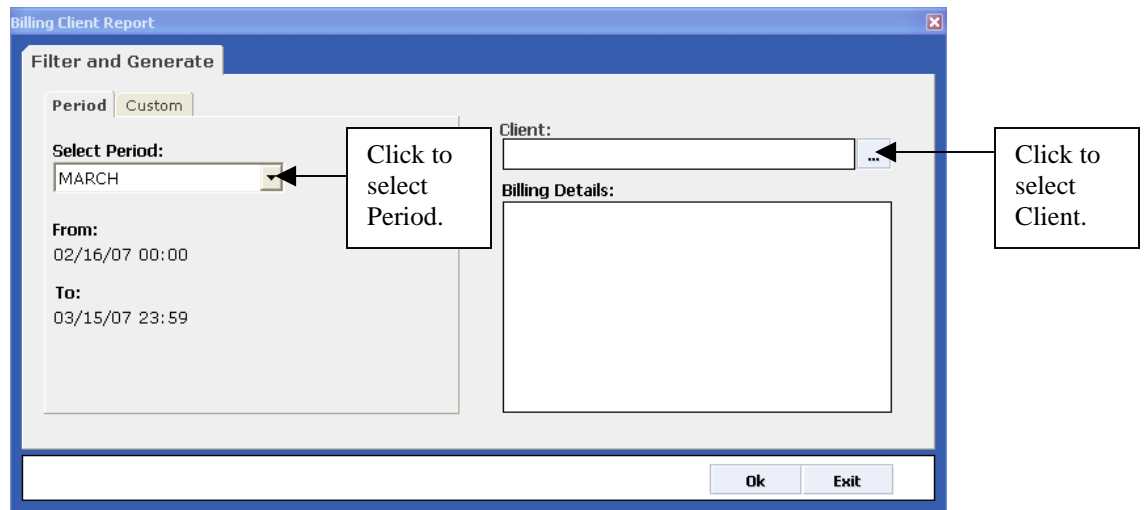


3.3.1: Printing the Detailed Billing Report

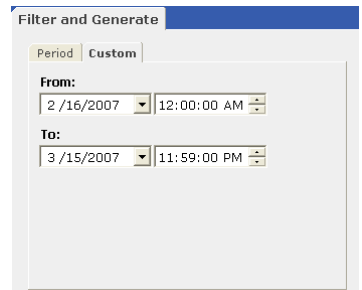
1. Double-click **Detailed** (under **Billing**) in the **Reports** screen. (See above) You will see the screen shown below.



2. Click **Options** to select Client and date range for the report. You will see the window shown on the next page.

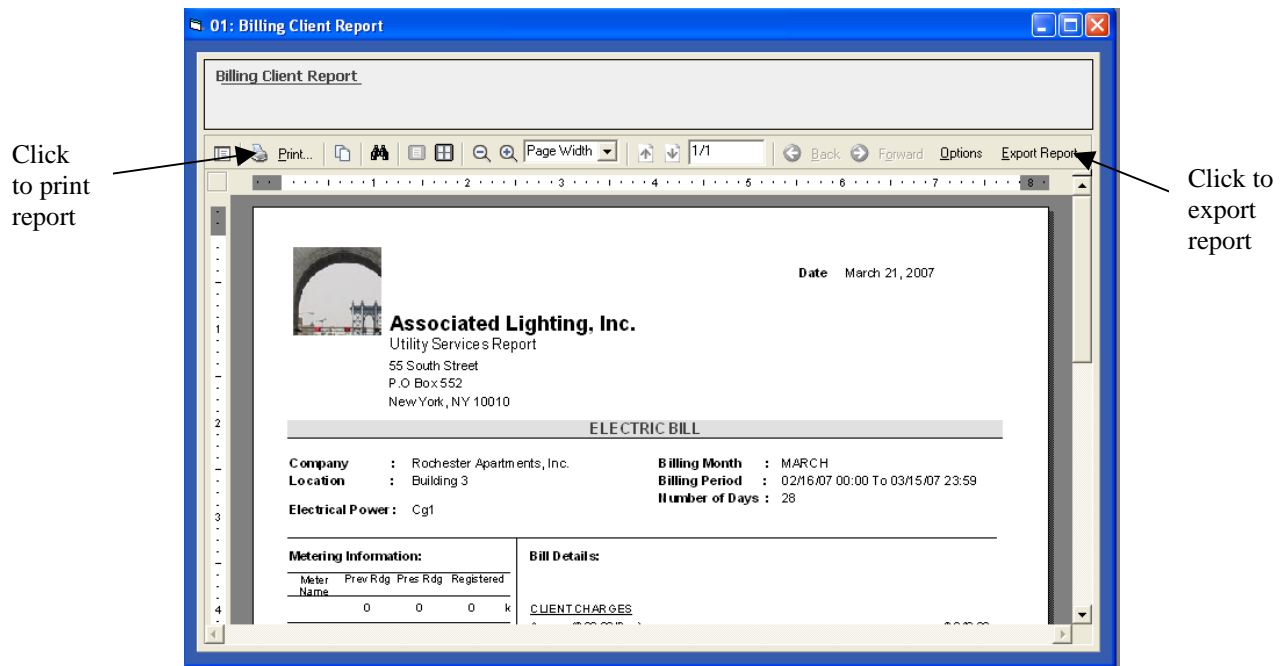


3. Click "...” to display a list of Clients.
4. Double-click on the Client whose report you want to print. The Client’s name displays in the **Client** field, and their locations and meters display in the **Billing Details** box.
5. Either:
 - Select **Billing Period** from the pull-down menu. These are the periods that were created using the **Rate Structure** feature. See Section 2.6 of Chapter 2 for instructions.
 - Click the **Custom** tab to enter a different Billing period for this report. The screen now displays the **Custom** tab, shown on the right. The **Custom** option allows you to specify a starting and ending date and time for this Billing report.



6. Click the **OK** button to print the report.
7. A message screen opens, displaying processing messages. Click **OK** to close the message screen.

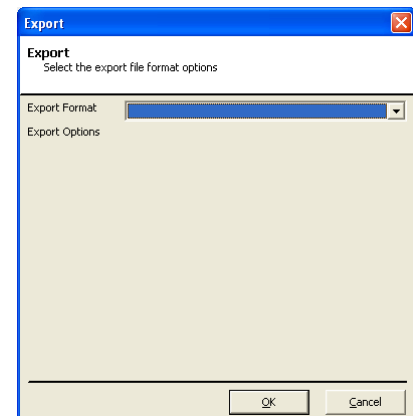
8. Your **Billing Report** is displayed on the screen.



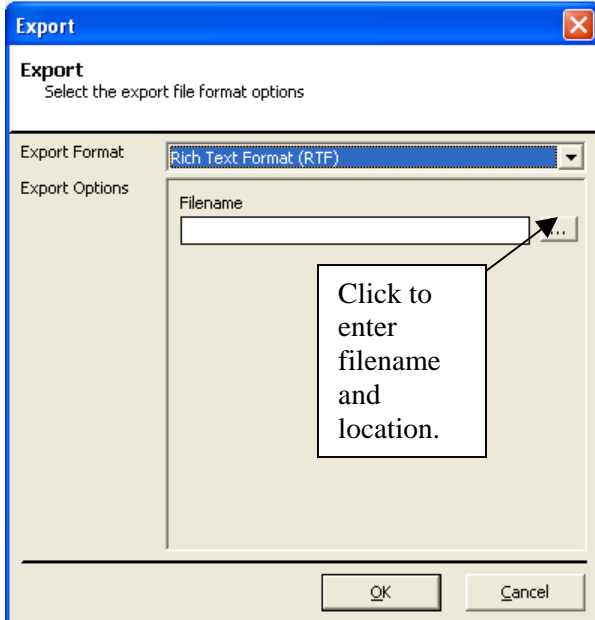
- Use the scroll bars to view the entire page.
- Use the **Back** and **Forward** buttons to scroll through the report pages.

From this screen you may:

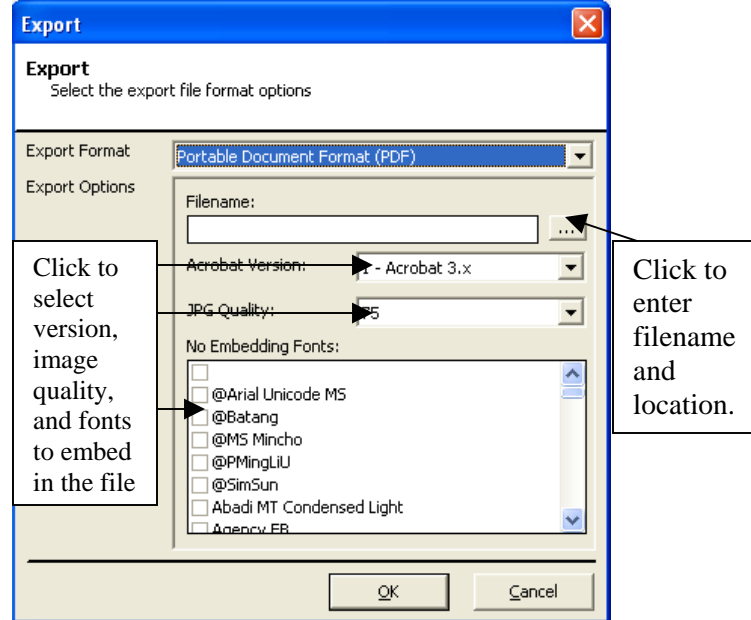
- **Print** the report: click the **Print** button.
- **Export** the report to another format: click the **Export Report** button. You will see the window shown on the right.
 - a. Select the **Export Format** you want to use, from the pull-down menu.
 - b. Once you select a format, entry fields will be displayed next to **Export Options**. See the sample screens on the next page.



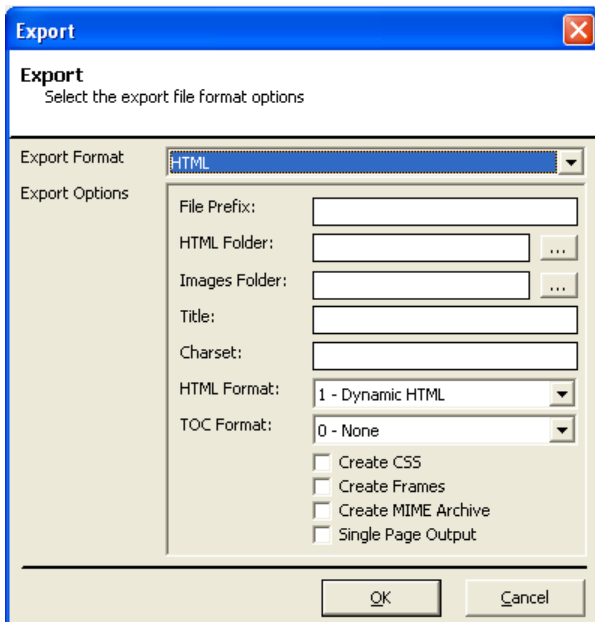
RTF (Rich Text Format) Export



PDF (Portable Document Format) Export

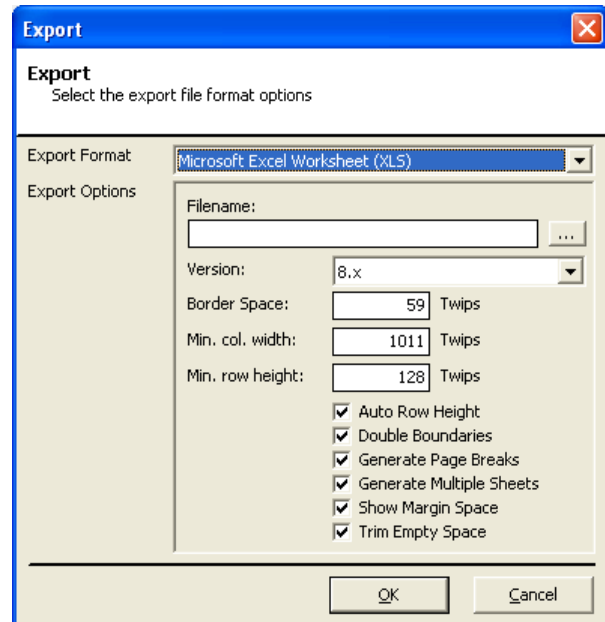


HTML Export



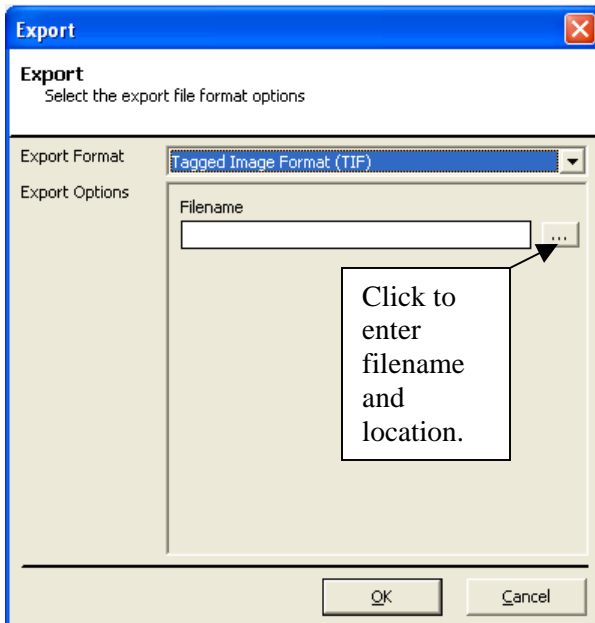
Select options for the HTML file.

Microsoft Excel Worksheet (XML)

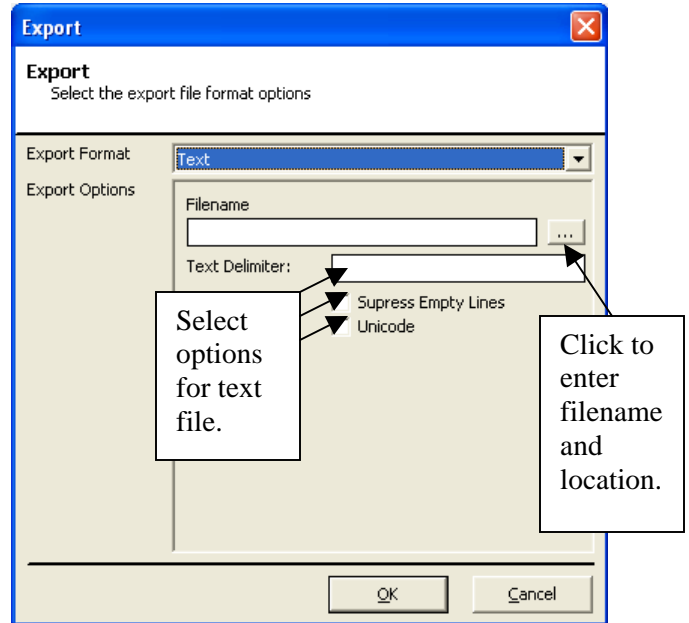


Select options for the Excel file.

HTML Export



Text Export

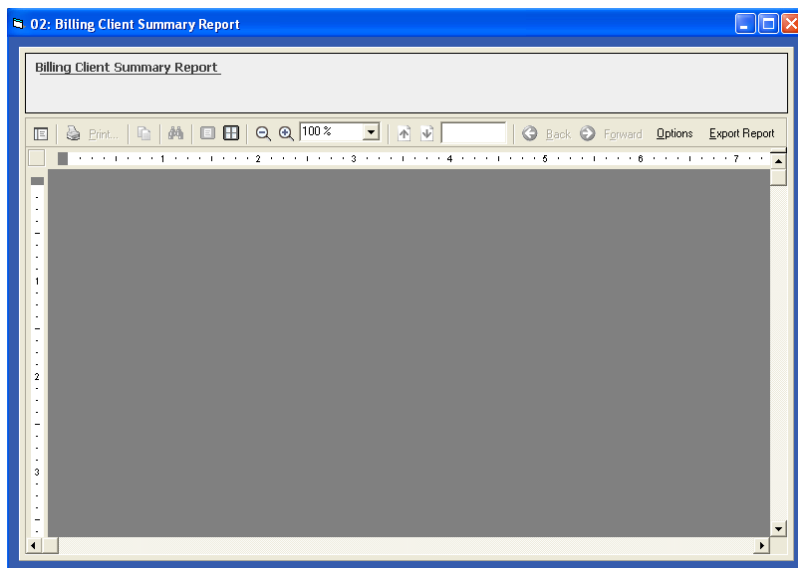


c. Click the **OK** button to create your **Export** file.

9. When you are finished with the report, click the “X” to close the screen.

3.3.2: Printing the Summary Billing Report

1. Double-click **Summary** (under **Billing**) in the **Reports** screen. You will see the screen shown below.



The procedure for generating the **Billing Summary Report** is the same as for the **Billing Detail Report**, except that the **Options** screen is a bit different.

2. Click **Options**. You will see the screen shown below.

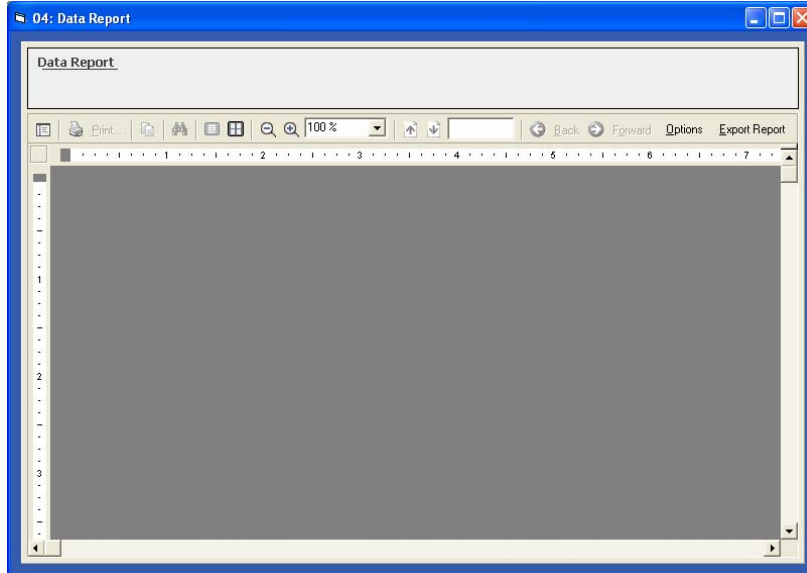
The screenshot shows a Windows-style dialog box titled "Billing Client Summary Report". It has a tab labeled "Filter and Generate". Inside the dialog, there are two main sections. On the left, under the heading "Period", there is a "Select Period:" label. Below this are two input fields: "From:" containing "2007" and "To:" containing "2007". A callout box with an arrow points to these fields, containing the text "Enter beginning and ending year." On the right, there is a "Client:" label above a text box with a dropdown arrow. A callout box with an arrow points to this dropdown, containing the text "Click to select Client." Below the Client field is a large empty box labeled "Billing Details:". At the bottom right of the dialog are "Ok" and "Exit" buttons.

3. Click "...” to display a list of Clients.
4. Double-click on the Client whose report you want to print. The Client’s name displays in the **Client** field, and their locations and meters display in the **Billing Details** box.
5. Enter a beginning and ending year for the report.

Continue following the procedure given in Section 3.3.1, from steps 6 - 9.

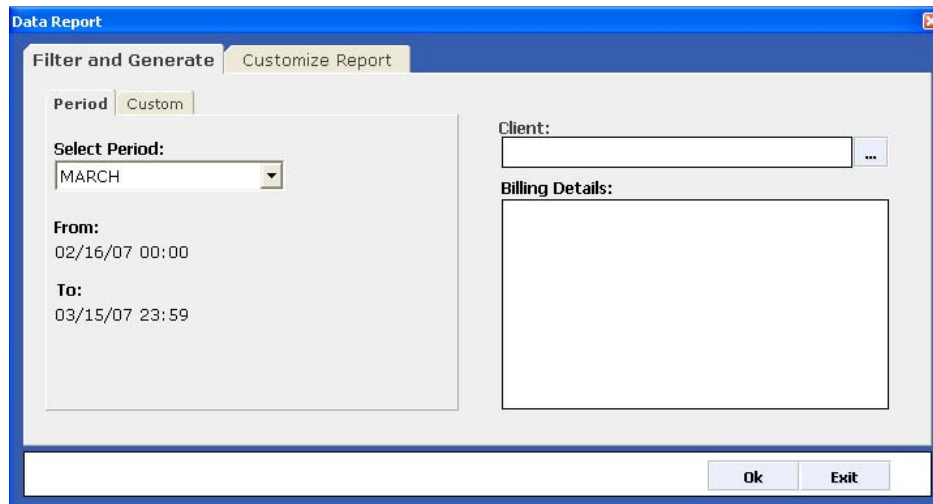
3.3.3: Printing the Data Report

1. Double-click **Detailed** under **Data Report** in the **Reports** screen. You will see the screen shown below.



The procedure for generating the **Data Report** is the same as for the **Billing Reports**, except that the **Options** screen is a bit different.

2. Click **Options**. You will see the screen shown below.



The **Options** screen for the **Data Report** has two tabs:

- **Filter and Generate:** this tab is processed in exactly the same way as the **Billing Detail Report**. Follow the procedure in Section 3.3.1, steps 3-5.
- **Customize Report:** this tab allows you to select the **Data Points** (meter readings and other logged values) you want to display on your **Data Report**.

- a. After selecting client and time range, click the **Customize Report** tab. This tab is shown below.

Data Report

Filter and Generate **Customize Report**

Data Points Item Select the Data Points for Customization

Client Name: Rochester

| # | Label | DataPoint | Line | Point | Date/Time | Remarks | Value | Scale |
|---|-------|-----------|------|-------|-----------|---------|-------|-------|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |

Chart Select the Data Points for Chart Customization

| Chart | DataPoint | Line | Point | Scale |
|-------|-----------|------|-------|-------|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |

Chart Descriptions:
 1.) DEMAND - Realtime Trend
 2.) DEMAND - Peak Value Per Day
 3.) ENERGY- Accumulated Interval Per Day

Ok Exit

- b. Click in the **DataPoint** field. A “...” button will appear in the field.
- c. Click on the “...” button. You will see the window shown on the right. Click either:
- **Data Points:** to select data points for the report. A screen opens, listing the available data points for the meters. Click the **OK** button after you have selected the data point you want.
 - **Custom Point:** to create customized data points, consisting of calculations of the available data points. You will see the screen shown below.

Line Point Date/Time

☒ Data Points
☐ Custom Point

Ok Exit

Formula Generator

Custom Formula Select the Data Points for Customization

Formula Name:

Formula:

Test Formula

| # | Var | DataPoint | Line | Point | Value |
|---|-----|-----------|------|-------|-------|
| 1 | V | | | | |
| 2 | W | | | | |
| 3 | X | | | | |
| 4 | Y | | | | |
| 5 | Z | | | | |

Ok Exit

- Enter a name for this formula (custom data point).
- Enter the formula using the Variables chart:

- a. Click in the **DataPoint** field to assign a data point to the Var(iable). The **Line** and **Point** fields are filled in for you.
- b. Click **OK** to copy the selected data point into the **DataPoint** field. The **Line**, **Point**, and **Value** fields are filled in for you.
- c. Write the **formula** for the custom data point in the **Formula** entry box.

For example:

- iii. Click the **Test Formula** button to validate your formula.
- iv. Click **OK** after you have completed your **Custom Data Point**.
- d. The data point you selected or created is displayed in the **DataPoint** field.
You can:
 - a. Enter a **Label** for the **DataPoint**
 - b. Click in the **Date/Time** field to **Show** or **Hide** the **timestamp** for the **DataPoint** on your report (select the option from the pull-down menu..
 - c. Click in the **Value** field to select it from the pull-down menu. The available values are: **Ave(rage)**, **Beg(inning)**, **End(ing)**, **Max(imum)**, **Min(imum)**, **Sum**, and **Sum(I)**.
 - d. Click in the **Scale** field to select it from the pull-down menu. The available scales are: **W(atts)**, **K(ilo)**, and **M(ega)**.

3. If you want to print a chart in your report:

- a. In the **Chart** entry box (at the bottom of the **Data Report** screen), click in the **DataPoint** field of the Chart you want to use.
 - **Chart 1:** Real-time Trend for Demand
 - **Chart 2:** Peak value per day for Demand
 - **Chart 3:** Accumulated /interval per day for Energy
- b. The **data point** you selected, along with the **Line** and **Point** fields are displayed in the **Chart** entry box.
- c. Click in the **Scale** field to select it from the pull-down menu. The available scales are: **W(atts)**, **K(ilo)**, and **M(ega)**.

4. When you have finished selecting **Data Points** for your report, click the **OK** button to print it.

5. A message screen opens, displaying processing messages. Click **OK** to close the message screen.

5. Your **Data** Report will be displayed on the screen. Follow the instructions from Section 3.3.1, steps 8-9.